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Brad, Anca Maria

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## The impact of tax policy on the welfare state

Anca Maria Brad

*The paper seeks to find the impact of tax policy on income and wealth redistribution, as well as its effects on welfare. Redistribution through transfers has a major contribution to reducing inequality and polarization of income. The fiscal reforms in present-day circumstances imply as outcome the so called “tax uniformity”, embedding income redistribution through budgetary mechanisms, an arrangement that greatly depends on the alternative chosen by the authorities for the distribution of tax burden among various categories of contributors. In Eastern European economies, under the absence of a sustainable economic growth and structural reforms, flat taxes can lead to polarization of income. The authors argue that if progressive rates are feasible in eastern countries, taxation reconsideration generates economic effects triggered by the change in tax burden and social effects triggered by a decrease in the unemployment, living conditions, education and labour.*

**Keywords:** tax policy, redistribution, flat tax, progressive rates, welfare state

### 1. Introduction

The flat tax has become increasingly attractive in Eastern Europe. Estonia was the first country to introduce the flat tax in 1994, followed by other two Baltic States and Russia in 2001, Serbia in 2003, the Slovak Republic and Ukraine in 2004, Romania and Georgia in 2005 (Appendix 1). Some economies have maintained different taxes on income and profit. Thus, referring to the flat tax levied on income, it varies from 12% in Ukraine, 33% in Lithuania and even 37.5 % in Iceland. Excepting Georgia and Latvia, the flat tax was associated with an increase in tax allowances. In 2008, Bulgaria (with a rate of 10%) and the Czech Republic followed the trend.

The flat tax induces effects, both for the state budget and the taxpayers. In all the countries that have successfully introduced the flat tax the taxable base of income tax and the number of taxpayers have increased and the black market labour decreased. Under these circumstances, the purpose of progressive rates is not an economic one, but rather social: if the poorest are exempt and the richest are at advantage than the burden slides towards the middle class. As a consequence of flat taxation, the share of taxes in personal revenues increased substantially for those with low incomes. In this case, a negative fiscal redistribution occurs (it has regressive effect) (Brad, 2011).

Since flat taxation doesn't impact positively in emerging economies, a tax gap occurs that must be covered because otherwise the economic and social programs are compromised. In most cases the gap was covered by an increase of direct and indirect taxation. In Romania the income tax doubled from 1.5% to 3%, and the tax rate on distributed dividends to private shareholders increased by 3.2 times, from 5% in 2004 to 16% in 2006. Another example is Slovakia, where the revenues actually collected from income tax and corporate profit declined significantly as a share of total public revenues from 18.3% to 14.6%, and from 15.4% to 12.5%, respectively. These losses were more than offset by the increased share of the VAT (as a percentage of total revenues) from 41.9% to 44.9%. Overall, budgetary revenues increased by 7.4% in current prices. A similar situation happened in Romania in 2005, the first year when the 16% flat tax on income and profit was introduced. The actual collected taxes on income and profits have declined (while slightly increased in current terms), but these losses were balanced by the massive growth of VAT revenues. Further, the actual budgetary revenues from

taxes on income and profits have grown, but only after levying additional taxes, for example, dividend tax increased from 5% to 16% and capital gains tax increased from 1% to 16%. Based on these data, it is difficult to argue that taxpayers in Slovakia and Romania were stimulated to invest but rather to consume.

The main argument in favor of the flat taxation refers to its simplicity and its effectiveness of administration since a single rate is more easily understood by taxpayers and easily managed by the tax authorities (Voinea and Mihaescu, 2009).

An important issue is related to the ways flat taxation may encouraged investments. Theoretically, lower taxes for domestic citizens lead to a higher disposable capital for investments. Lowering the burden on high incomes may direct the after tax income towards luxury goods mainly from imports, thus impeding on productive investments. Nevertheless, statistics show that, *ceteris paribus*, flat taxation, in Romania, has led to increased foreign direct investment, investors finding the appropriate circumstances. Thus, according to the Romanian Agency for Foreign Investments, a year after the introduction of flat tax, in 2006, foreign direct investment increased by 57% (2004), when the progressive rates were in use.

Unlike the flat taxation, no matter on how many brackets progressive rates are spread on, they are less stimulating and may trigger tax avoidance and evasion. Therefore, the aim of progressive taxation is mainly redistributive rather than economical. The argument against the view that flat taxation favours individuals with high incomes, is that it applies to profit earning companies rather than individual incomes (salaries, wages, etc.). It is obvious that the middle class is favoured by flat taxation and therefore this class should be stimulated as the driver of the economy.

In terms the equity, tax distribution is intensely debated among economists. The question of fairness is centered on tax deductions and allowances that are abolished when a flat tax is introduced and the effects induced on businesses and taxpayers. The authors argue that when the theoretical effects of flat taxation do not apply (the middle class is insignificant) allowances and deductions should be used for low income individuals. In this manner we think that an indirect progressivity and redistribution are possible.

Redistribution by social transfers (benefits), taxes and social contributions, has a major lead to the reduction of income inequality and polarization. It is an area where policy makers face the need to ensure the balance between equity and efficiency, in order to assess the impact of redistribution as a fundamental of effective social policies (Dolenc and Laporšek, 2010).

## **2. Theoretical background**

Discussions on tax reforms take into account, usually three versions: flat, progressive and dual system, as a combination of the first two. Recent developments, particularly among Eastern European countries, show a trend towards adopting flat taxation. Literature provides interesting insights on the subject.

Murphy (2006) provides a plausible explanation, reflecting on flat taxation as a political objective, not fiscal one. In addition, Keen et al (2006) believe that flat taxation belong to the political marketing, and is a signal of radical political doctrine change, from a social driven one towards a liberal one (example in Russia, Georgia, Ukraine and Romania).

Another major argument is that, the flat taxation would help to improve the revenue collection by reducing tax evasion and tax base expansion. Keen et al. (2006) show that after the first year of flat taxation, budget revenues (as a percentage of GDP) decreased in Estonia, Georgia, Romania, Slovak Republic and Ukraine, while they increased in Latvia, Lithuania and Russia. Interpreting these results, we think that there are major differences among these countries concerning voluntary compliance, customs, tax culture and moral and consequently the effects were not the same. Tax rate cuts can affect tax revenues through two main channels: affecting the tax base or compliance (Paulus et al., 2008).

Flat tax reform in Eastern Europe, have little in common with the original idea, because none of them meets all the requirements for a pure flat tax (from Hall and Rabushka's view), i.e. there are no taxes levied on savings, foreign earnings, capital gains, inheritances donations, and there are no exemption or deduction. Among all the countries Slovakia is closest to these requirements.

In terms of distributional measures literature divides countries in two groups: inequality, polarization, (relative) poverty and richness are rather high in Southern European countries (Greece, Portugal and Spain), whereas they are rather low in Continental Europe (Austria, Belgium, Germany, Luxembourg) and Finland. In terms of redistribution two different groups became visible: countries where progression is rather low (Finland, the UK, Germany, Austria and the Netherlands), whereas it is rather high in Belgium, Greece, Portugal, Luxembourg and Spain.

In response to the current economic crisis, the Governments of the EU member states have been adjusted the economic and fiscal targets. But, still key priorities are to ensure the sustainability of public finances in the medium and long-term and intergenerational equitable distribution of tax burden and costs. In short-term, the Government goals are: to support monetary policy, in particular the symmetrical operation of automatic stabilizers, in order to limit the volatility of the economy and to support the further reduction of inflation and interest rates. Macroeconomic policy coordination, (especially the income tax with that money one) is needed to correct macroeconomic imbalances and preventing sustainable worsening over the projection horizon.

If we consider measuring the gap between budgetary revenues and expenditures, we may assert that Great Britain and Ireland were the most affected economies in 2008, due to the fact that they are the European economies mostly depending on USA. The significant gap occurred in 2008, which was a year of financial and economic crisis, the budgetary expenditures increase with 4.35%, compared to 2007.

If a sustainable growth rate is visible and its benefits are more equitably distributed between individuals, an improved social cohesion, without increases in the redistributed budgetary resources results. However, the correlation between economic growth and cohesion is not always validated, the Baltic countries, Romania and Bulgaria recording a deeper inequality, even under substantial growth during 2008. Although, the absolute lower income increased, its pace was insignificant as compared to higher incomes, adversely affecting the objective of social cohesion (Socol et al., 2010).

Welfare state is a concept according to which the state has an important role in protecting and promoting economic and social wellbeing of citizens. It is based on equal distribution of wealth, opportunities and public responsibility, in absence of which a decent living standard is not attainable (Lugo, 2007).

Moreover, there are emerging countries (the Czech Republic, Slovakia, Slovenia, Hungary, Poland, Estonia, Lithuania, Latvia, Romania and Bulgaria) trying to catch up more developed countries. Although these economies have undergone a process of transition to a market economy, there are

significant differences in terms of national wealth management, as in the case of Hungary and Slovenia that have decided to embark on increased spending on social protection, while the Baltic countries have chosen to decrease these expenditures. It is commendable that the latter ones have succeeded to achieve higher growth rates. Even under crisis, employment rates remained rather stable in Slovenia and increased in the Czech Republic.

Literature clearly offers different arguments for and against a tax reform:

- Pros of flat tax:
  - Reduce the tax burden on taxpayers;
  - Attracting foreign investments and creating jobs;
  - Increase employment;
  - Reduce “black” labor;
  - Creating a surplus that can be directed to investments, saving and consumption;
  - Discourage tax emigration;
  - Tax administration was simplified.
- Cons of flat tax:
  - In emerging countries, flat taxation is highly inequitable;
  - The tax burden significantly increases for low income taxpayers;
  - Flat taxation induces a polarization of incomes and an increase of social inequalities;

### **3. Empirical data**

In this section, the feasibility of introducing progressive taxation in Eastern European countries will be considered. It is equally important to analyze the various social transfers in fighting poverty and reducing income inequality, since aggregate indicators that can sustain the welfare state may be different. Further, a number of examples are given to illustrate the welfare state.

Moreover, in the current economic global context, each country wants to maintain or to increase competitiveness in order to attract as many foreign investments as possible and bring to surface the underground economy, objective that cannot be accomplished by progressive taxation. Swapping flat taxation with the progressive one, shows an unsustainable tax reform and an excessive burden for taxpayers. Moreover, it would determine foreign companies to leave the country, given that the flat tax was the main incentive to invest.

The opportunity to levy progressive taxation will be discussed as compared to advantages and disadvantages of flat taxes.

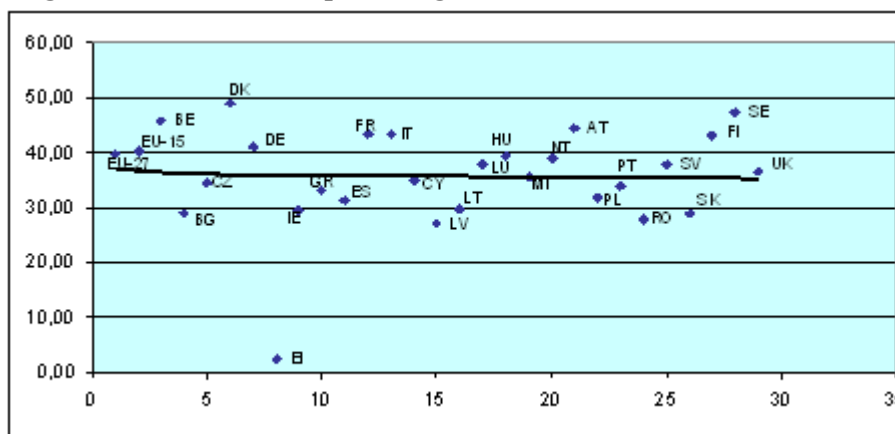
#### **3.1. Tax burden**

The economic and financial crisis, together with the fiscal policy measures enacted by the member states, has begun to impact on fiscal incomes. In 2009, the total collected fiscal incomes, including social contribution, in the EU-27, dropped to 39.7% of the G.D.P, by 0.8 percentage points compared to 2008, representing over 90 percentage points of the total fiscal income. The pace of fiscal revenues growth as well as the nominal G.D.P, slowed down in 2009 both in EU-27 and in EA-16

Denmark and Sweden reported the highest percentage of fiscal revenues in the G.D.P. for 2009 (49% and 47.40% respectively), approximately half of their G.D.P (Figure 1). In contrast, lower levels were generally observed in countries which have joined the EU since 2004 - it is a well known fact that the

level recorded in 2004 was the lowest during 1998-2009 (European Commission, 2010). Among these, Estonia exhibits the lowest value (2.30%), well under the EU-27 average (39.70%). These differences are, to a great extent, the result of the share the public sector has in the economy. Just before the extension of the EU in 2004, there was a great variety of tax rates, ranking from the highest 50% in the Northern countries and Belgium, to much lower rates in countries such as Ireland, Spain, Great Britain and Greece.

**Figure 1: Tax burden as percentage of the G.D.P. for the EU-27 in 2009**



Source: Eurostat (2010)

Among the countries that use the flat taxation, the Czech Republic (34.5%) emerges as having the highest tax burden in 2009. On the opposite side is Estonia (2.3%), with the lowest value of EU-27, in 2009. All the other countries recorded a tax burden between 27% and 29% , which is below the EU-27 average. Nevertheless, it is desirable that the tax burden to be correlated with the living standard of the population in order to reflect the reality concerning the purchasing power that remains disposable for consumption, investments and savings. Based on available data, the viable solution is to relax taxation and expand the tax base to the point that supports economic growth.

We believe that the efficiency of a more relaxed fiscal policy depends on the credibility of the undertaken measures. If the decisions are perceived as being inconsistent, they will induce instability in the economic system, aggravated by a reduced private consumption. For example, it is possible that the decision to reduce taxation, will not automatically generate a significant increase in consumption (multiplier effect in the economy), provided that there is a state of pessimism or the access to credit is difficult. Therefore, fiscal multipliers tend to be rather below par and their value drops even more in times of deep economic recession.

### 3.2. Unemployment

The unemployment rate is an important indicator embedding both social and economic dimensions. Rising unemployment results in a loss of income for individuals, increasing pressure on government social benefits and a reduction in tax revenue. From an economic perspective, unemployment may be viewed as unused labour capacity.

The overall unemployment rate in the EU-27 reached 9.6 % in 2010 (Figure 3). As compared to the 2009 rates, the unemployment rate rose by 0.6 %.The unemployment rate rose in all the 27 EU Member States between 2009 and 2010, except Germany, Luxembourg, Malta and Austria. Countries as Belgium, France, Romania, Finland, Sweden and the UK also performed well, showing only moderate increases (below 0.5 %) between 2009 and 2010. While Estonia and Lithuania were among

the countries with the highest increases, they recorded decreases in unemployment in the second half of 2010. High increases were also perceived in Greece, Spain and Slovakia. Spain remained the country with the highest overall unemployment rate in 2010, at 20.1 %. The dispersion of unemployment across the EU-27 continued to increase during 2010. The lowest rate was performed in Austria (4.4%) and Netherlands (4.5%).

Long-term unemployment is one of the main concerns of policymakers. Apart from its financial and social effects on personal life, long-term unemployment negatively affects social cohesion and, ultimately, may hinder economic growth. In total, 3.8 % of the labour force in the EU-27 in 2010 had been unemployed for more than one year; almost half of these, 1.8 % of the labour force, had been unemployed for more than two years.

Unemployment benefits are quite generous in Belgium and Spain, both in terms of amount and duration. Belgium provides earnings related unemployment benefits paid at a rate of around 60% of previous earnings, with minimum and maximum daily amounts and a family component with dependant's additions conditional on the dependant not receiving income in excess of a specified amount. After 12 months reduced amounts are still payable. Means tested income support operates as an alternative to unemployment benefits for those not eligible and also as a top-up in cases where unemployment benefit is not sufficient to reach the levels of household income guaranteed by income support. In Spain, the earnings related unemployment benefit is paid at a rate of 70% of the previous earnings, with ceilings. It lasts for between 4 and 24 months, depending on contribution history. There is also a means-tested unemployment assistance scheme which lasts for 6 months with the possibility of extension up to a maximum of 18 months. There is no national social assistance scheme but instead, a series of widely varying regional schemes which are simulated in EUROMOD (Atkinson and Marlier, 2010).

As figure 2 shows, among the Eastern European countries that use flat taxation, Latvia recorded the highest level (17.10%) in 2010. Unemployment rates reached high values in Estonia (13.8%) and Lithuania (13,7%). On the other hand Romania, Bulgaria and Czech Republic have similar rates, around 6.8 percentage points.

The evolution of unemployment rates in these countries, during 2000-2009 has a similar trend. Between 2007 and 2008 the unemployment rate dropped to the lowest values in all the state. In 2009, the unemployment rate began to rise in 2010, Estonia reaching, for example, an unemployment rate of 18.7%. Thus, under the pressure of the global economic crisis that started in 2008 the unemployment rates are on an upward trend, reaching values close to those recorded at the beginning of the analysis.

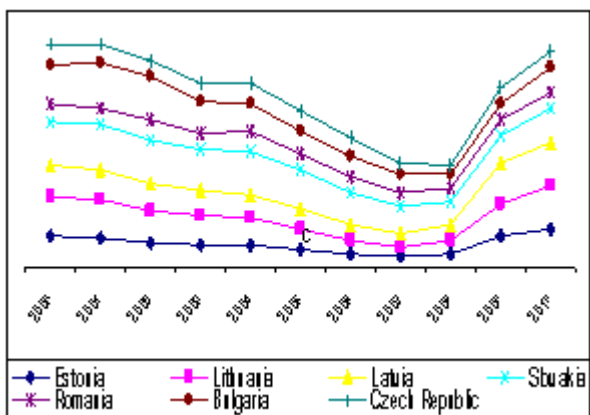
Under these circumstances, the redistribution induced by unemployment benefits should be considered, since they may have perverse effects among the citizens that are on benefits.

Considering the level and the recent developments of the unemployment rate in Eastern Europe, in our opinion it is not recommendable to apply a progressive taxation, because the perception of a higher labour taxation can cause a serious increase in unemployment, a reduction of wages with direct and of the income.

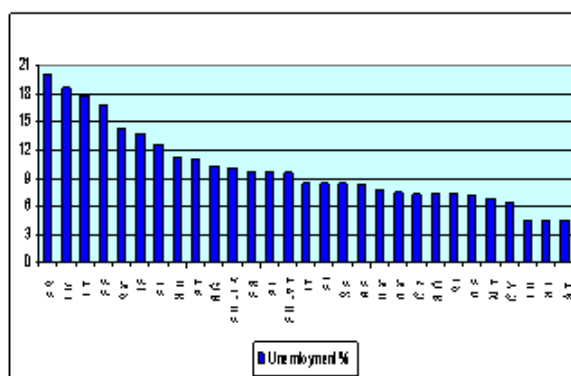
Thus, on one hand the employer will try to avoid taxing a part of the employee wage by not declaring the whole amount, or to hire labour without legal documents. On the other hand, employees with average wages that exceed the minimum established as non-taxable will feel progressive taxation effects of a loss of income. They will try to make up for the loss, either simply quitting their job and live on welfare, or by addressing the labour market for a better paid job. These constant movements

trapped many employees since the beginning of the crisis affecting the structure of their demand. If they will not concede, they will have to change the demand for goods and services, by substituting certain categories of products or even giving up the goods with higher the price elasticity. Inevitably, this chain leads to changes in aggregate demand structure.

**Figure 2: Unemployment in flat-tax countries**



**Figure 3: Unemployment rates EU-27 in 2010**



Source: Eurostat (2010)

### 3.3. Income polarization

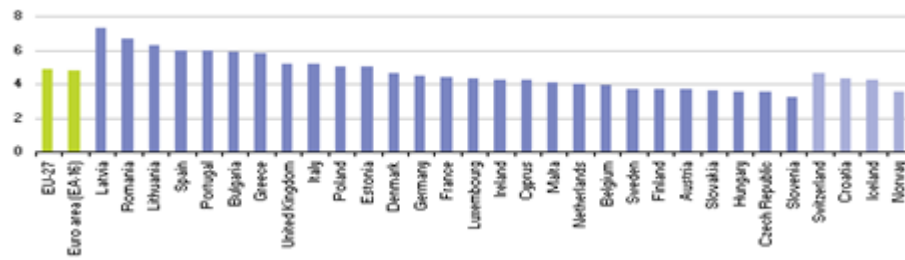
Governments cannot fight poverty and social exclusion without analysing the economic and social inequalities within the society. Data on economic inequality becomes particularly important for estimating relative poverty, because the distribution of economic resources may have a direct influence on the extent and depth of poverty.

Economic polarization leads to social polarization, characterized by discrimination, marginalization, segregation (residential, occupational, etc.), and perpetual poverty. Here the question of equal opportunities arises for the disadvantaged. There are wide inequalities in the distribution of income among the population of the EU-27 in 2009: 20% of the population with the highest disposable income received almost five times the income of 80% of the population with the lowest disposable income. This ratio varied considerably across the Member States (see Figure 4), from 3.2 in Slovenia, 3.5 in both Czech Republic and Hungary, to more than 5.5 in Greece (5.8), Bulgaria (5.9), Spain and Portugal (both 6.0), Lithuania (6.3) and reaching higher values in Romania (6.7) and Latvia (7.3).

Besides, different groups of the society feel differently the inequalities. One group of particular interest is that of elderly (retired) people, in part reflecting the growing proportion of the EU's population aged over 65 years. The pension systems can play an important part in addressing poverty amongst the elderly. In this respect, it is interesting to compare the incomes of the elderly with the rest of the population. A study underwent by Eurostat shows that across the EU-27 as a whole, people aged 65 and more had a median income which in 2009 was around 86% of the median income for the population under the age of 65. Hungary and Luxembourg were the only Member States where the income of the elderly was higher than the income of those under 65.

But, policies to reduce inequality and polarization go beyond the redistribution of income. It is necessary to promote policies aimed to increase employment. All these policies can contribute to the decrease of low-income population.



**Figure 4: Inequality of income distribution 2009**

Source: Eurostat (2010)

In Eastern European countries, in the absence of structural economic growth, the application of flat taxation can lead to polarization. We think that flat taxation is a form of liberalism, but in order to have positive effects the middle class must be predominant. From this statement we can draw the conclusion that a flat tax polarized the population in most Eastern European countries, since the middle class is prevailing. The data analysis of income inequality in 2009 shows that there are countries as Latvia, Romania, Lithuania and Bulgaria which have the highest levels of income inequality in the EU Member States. In these countries it is important to promote economic and social policies designed to improve the current distribution of income. The main mechanism to reduce inequality is redistribution of income and wealth through taxes, social contributions and social benefits. Basically, it is an area where policy makers are faced with the need to bounce on equity and efficiency, in order to diminish inequality and polarisation through redistribution. Under these circumstances, we believe that the appropriate tax rate sliding progressively on 2 or 3 brackets. Alternatively, another way to reduce income inequality may be increasing the flat tax, which would lead to higher taxation of wealth and high incomes. However, this increase would mean lower disposable wages, a drop of foreign direct investments, resulting, most likely, in a higher unemployment and inevitable lower living standards.

### 3.4. Living standard

Favourable living standards depend on a wide range of determinants, which may be divided into those that are income-related and those that are not. The income distribution within a country provides a picture of inequalities: on the one hand, inequalities may create incentives for people to improve their situation by intensifying work, innovation or acquiring new skills, while on the other hand, crime, poverty and social exclusion are often seen as being linked to such income inequalities.

In four Member States, namely Latvia (25.7%), Romania (22.4%), Bulgaria (21.8%) and Lithuania (20.6%), one fifth or more of the population was assessed to be at-risk-of-poverty. Among the EU Member States the lowest percentages of persons at-risk-of-poverty were observed in the Czech Republic (8.6%), Slovakia (11.0%), the Netherlands (11.1%) and Slovenia (11.3%); Iceland (10.2%) and Norway (11.7%) also reported relatively low shares of their respective populations at-risk-of-poverty.

In a study made by Anthony B. Atkinson and Eric Marlier (2010), the at-risk-of-poverty threshold is set at 60% of the national median equivalised disposable income. It is often expressed in purchasing power standards (PPS) in order to take account of the differences in the cost of living across countries. It varies greatly from about PPS 2 000 in Romania and PPS 3 000 in Bulgaria to more than PPS 11 000 in five Member States as well as Iceland, Norway and Switzerland, with the highest value in Luxembourg (PPS 16 000).

Advocates of the flat tax argue that the former communist states of Eastern Europe have benefited from the adoption of a flat tax. Most of these nations have experienced strong economic growth of 6% and higher in recent years, some of them, particularly the Baltic countries, experience exceptional GDP growth of around 10% yearly.

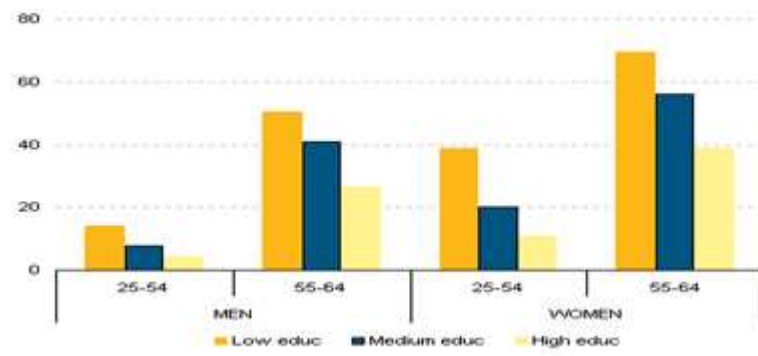
We consider that the living standard and welfare interrelated, since welfare implies a decent living standard at individual and community level as well. In addition, the living standard cannot be measured only based on quantifiable variables like income, social benefits, capital goods, but by also pursuing indicators like education level and labour.

### 3.5. Education and labour

Qualifications acquired through education are still the best insurance against unemployment, which clearly increases the lower the level of education attained. This characteristic is noticeable in almost every Member State in 2010, as the average unemployment rate in the EU-27 for those having attained at most a lower secondary education was 14.2 %, much higher than the rate of unemployment for those that had obtained a tertiary education qualification (4.9 %).

In all Member States women are more likely to be unemployed: in the Northern and Baltic countries the gender gap was 7 % in 2010, while in Malta, Italy and Greece the difference was more than 20%. The extreme cases are Lithuania, where the gender difference is only 3.6 percentage points, and Malta, where it reaches 35.4 percentage points.

**Figure 5: Inactivity rates by sex, age and educational level in EU-27 in 2010**



Source: Eurostat (2011)

3.5.1.1 Individuals with lower education are more likely to be excluded from the labour market (Figure 5). As shown above, the incidence of inactivity in the labour market is very gender-specific. Another determining factor is the educational level. Individuals attaining a low educational level are more likely to be inactive. In 2010, for the entire EU-27, the inactivity rate of individuals aged 25-64 who had attained a low educational level (i.e. less than lower secondary) was 37.3 %, as compared to 20.8 % for individuals with a medium educational level (at least lower secondary level, but less than tertiary) and 11.8 % for individuals with a high (i.e. tertiary) level.

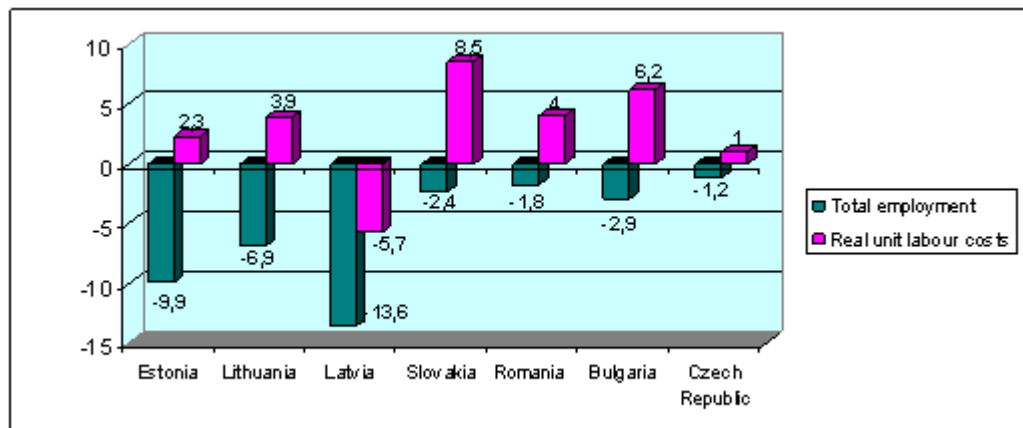
It is a well-known fact that, in the EU, the current tax structure discourages the creation of workplaces. The tax burden of the workforce increases its cost and affects the workforce demand in two ways: it encourages the substitution of the work factor with capital to a greater extent than the one determined by the technological change and it reduces the companies' profitability, leading to a decrease in workforce demand.

In all Eastern European countries that apply flat taxation, employment rates showed a negative evolution, in 2010 compared to 2009. Figure no. 6 shows that Latvia registered the most significant decrease of 13.6 percentage points. Making a connection with the situation of unemployment in these countries, we have already seen that in Latvia, in 2010, the highest level of unemployment (-17.10%) was recorded of the entire EU. In addition, there was a real reduction of labour costs (-5.7%), the only country in the group that shows negative evolution in this respect. In Estonia (-9.9%) and Lithuania (-6.9%) there are also concerns for the sharp decline of the employment rate in 2010 compared to 2009.

On the other hand, countries like Bulgaria (-2.9%), Slovakia (2.4%) and Romania (-1.8%) unemployment was not a subject of concern since a part of the labour force left the country and did not burden the market. In terms of actual labour cost, these countries reach the highest levels of growth, compared with 2009. Thus, Slovakia is the country where the unit cost of labour in 2010 increased by 8.5 percentage points compared with 2009. In the Czech Republic, both employment rate, and the real unit cost, shows a constant evolution in the year 2010.

To conclude, we can say that the tax reform it is not feasible in the now-a-days context since the negative trend in the evolution of workforce in Eastern European countries that apply the flat tax, is worrying. In the absence of related reforms made on the labour market, and active measures to restore employment, progressive tax rates can lead to reduction wages and thus disposable income may encourage illegal work.

**Figure 6: Employment and real unit labor costs – annual % growth in flat-tax countries**



Source: European Commission

### 3.6. The budgetary implications of ageing

Aside from the effect on economic growth, an ageing population also entails additional government expenditure in terms of public provision of age-related transfers and services. The fiscal impact of ageing is therefore projected to be substantial in almost all Member States; these costs will accelerate significantly over the course of the next decade. In the absence of policy changes, public pension expenditure is projected to increase significantly in most Member States because of intensive retirements and longevity.

As Figure 7 shows, public expenditure on health care is projected to grow by 1.4 percentage points of GDP in the EU by 2060 from a base of just under 7% of GDP. The increase in living standard conditions is an important driver of healthcare costs, affecting the demand for healthcare mainly through higher expectations on quantity and quality of care to be provided or financed by government.

public spending on long-term care is projected to increase by 1.1 % of GDP by 2060 due to the fact that the very old (aged 80+) will be the fastest growing age class of the population in the future.

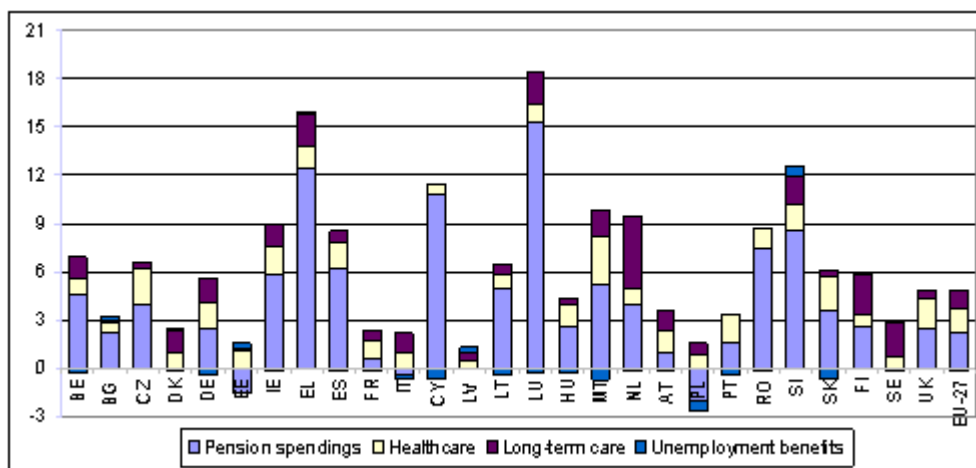
In the EU, expenditure on unemployment benefits is projected to fall from 0.8% of GDP in 2007 to 0.6% of GDP in 2060, though large fluctuations may be expected over such a long period.

Overall, on the basis of current policies, age related public expenditure is projected to increase on average by 4.3 percentage points of GDP by 2060 in the EU – especially through pension, healthcare and long-term care spending.

As we can see, the most significant impact on public spending will have the pension spending, which means that the ratio of population and pensioners will record alarming values. This negative influence is determined by population ageing.

In Romania pension spending is supposed to increase from 7.4% of GDP, which is the highest value recorded on this group of countries, projected for 2060. On the other side, it is Latvia, which doesn't foresee an increase for pension spending for 2060.

**Figure 7: The budgetary implications of ageing**



Source: Sustainability report in 2009

Expenditure on health care projected for 2060 in GDP represent the most important increase (+2.2% of GDP) in the Czech Republic, while in Latvia, the implications of ageing may affect healthcare expenditure only by 0.5% of GDP. „Long-term care” spending is influenced insignificantly by ageing, in 2060. At the same time, expenditure on unemployment benefits for 2060 is projected to fall, in comparison with 2007, for example in Slovakia (-0.6%), Lithuania (-0.4%) and Romania (-0.2%).

In general, the budgetary implications of ageing are higher in Romania, with an increasing projected in the public spending of 8.5 percentage points of the GDP, in 2060. On the other side, there is Latvia, with a favourable projection of the public spending increase, of only 1.3 percentage points of the GDP, in 2060, compared to 2007.

Romania is the most affected country because of the implications of ageing, especially because of the public pension spending. In this situation, we can recommend active occupation measures that would be able to stimulate the employees to extend businesses and hire more labour force, a harmonization of the pensioning age with the pensioning age of other developed countries from EU-27, promoting integration politics, especially for the older population using the example of the Northern countries.

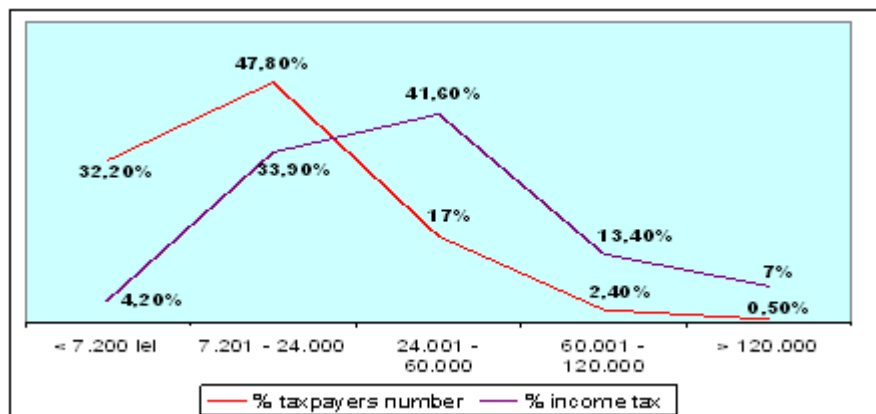
## 4. The case of Romania

According to the Romanian government, in the first two years of flat taxation, higher budgetary revenues were collected compared with 2004, black market labour was discouraged, and more incomes were declared. On the other hand, until 2009, a number of adverse effects appeared, among which the polarisation of income is the most concerning. The gap between the richest 20% of the population and the rest of the 80% of the population deepened (Figure 8).

Appendix 2 shows that, between 2000 and 2004, budget revenues increased in line with the average wage, while, with the introduction of flat tax of 16%, revenues grew faster than average gross wage.

In other words, *ceteris paribus*, a lower tax may lead to higher budgetary revenues. Countries using progressive taxation have a first bracket of income exempt from taxation in order to preserve the purchasing power and to allow an equitable redistribution.

**Figure 8: Income tax in Romania 2009**



Source: khris.ro

Figure 8 shows that taxpayers with small incomes (under 7.200 lei per year) representing 32.5% of the total tax payers have paid 476 mil lei in taxes, i.e. 4.2% of the total of collected tax. At the same time, taxpayers with bigger incomes (>120.000 lei) represent only 0.5%, but have paid taxes up to 801 mil lei, i.e. 7% of the total value. Approximately 1.2 millions of taxpayers (a total of 20%) assure basically the largest part of the collected taxes (a total of 62%).

Income inequality is not so high in Romania comparative with other countries; it doesn't exceed the limits accepted generally in the developed economies. Nevertheless, the polarisation is important since half of the population live on benefits.

## 5. Conclusions

Many countries in Eastern Europe have chosen flat taxation in order to attract more foreign investments. But, in most cases, it was a political measure meant to mark a change in the economic doctrine, and ignoring the economical, cultural, behavioural specificities of these countries. Therefore, the effects of flat taxation are differentiated. Countries like the Czech Republic enjoyed the positive effects of flat taxation: unemployment (6.7%) is sustainable, the incomes gap (3.5), in 2009 is below average, the tax burden (34.5%), in 2009 is under the level of EU-27 (39.7%), the percentages of persons at-risk-of-poverty is quite small (8.6%). As well as, Slovakia recorded positive effects of flat

taxation: the tax burden (28.9%), in 2009 is under the EU-27 average (39.7%), the inequality of income distribution (3.6%) is the lowest, in 2009, the cost of ageing those not exceed the limits and it is observed a lower percentages of persons at-risk-of-poverty (11.0%).

By contrast, there are countries in which flat taxation does not generated the expected benefits. Latvia recorded an unsustainable unemployment (17.10%), in 2010, even if the tax burden (27%) is under the level of EU-27, inequality of income distribution records the highest level (7.3%) of EU, in 2009, the poverty risk is reported at about 25.7%, in 2009, being the highest value among the EU member states. In answer to the negative effects of flat taxation, Estonia and Lithuania have recorded the highest increases of unemployment rate, in 2009. Also, Estonia (-9.9%) and Lithuania (-6.9%) registered alarming diminishings of the labour occupation level, in 2010. On the opposite side, the tax burden in Estonia (2.3%) has the lowest value of EU-27, in 2009.

As long as I am concerned, the progressive taxation is feasible in countries where the income inequality reaches worrying levels, owing to the absence of a structural economic growth. Consequently, the author takes into account the countries without an ordinary percentage of people at-risk-of-poverty. On the other hand, the flat taxation is usefull in countries where tax burden is under the level of EU-27, the unemployment is unsustainable and the employment rates showed a negative trend. Beyond the shadow of a doubt, flat taxation will generate positive effects only if the middle class is predominant.

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## References

1. Atkinson, A. B. – Marlier, E. (2010): *Income and living conditions in Europe*. Available on-line at [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-31-10-555/EN/KS-31-10-555-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-31-10-555/EN/KS-31-10-555-EN.PDF), accessed: 6 January 2012
2. Brad, A. (2011a): Fiscal Pressure – Evolution and influences in present-day circumstances, *Timisoara Journal of Economics*, 14, 1.
3. Brad, A. (2011b): Variability of taxes and the discriminatory effect of the tax system, *Studia Universitatis - Seria Stiinte Economice*, vol.1, pp. 397-404.
4. Brezeanu, P. (2007): *European Finance*. C.H.Beck, Bucharest
5. Ciurezu, T. – Dracea, M. (2004): Fiscal pressure on EU member states: its causes and effects of the reduction, *Public Finance and Accounting*, 15, February, pp. 31-34.
6. Dolenc, P. – Laporšek, S. (2010): Tax Wedge on Labour and its Effect on Employment Growth in the European Union – *Prague Economic Papers*, 14, pp. 344-358.
7. Esping, A. (1990): *The Three Worlds of Welfare Capitalism*. Polity Press, Cambridge.
8. Keen, M. – Kim, Y. – Varsano, R. (2006): *The “Flat Tax(es)”: Principles and Evidence*, International Monetary Fund. Available on-line at <http://www.imf.org/external/pubs/ft/wp/2006/wp06218.pdf>, accessed: 15 January 2012
9. Lugo, M.A. (2007): Comparing multidimensional indices of inequality: Methods and application. *Research on Economic Inequality*, 14, pp. 213-236.

10. Molnar, M. (2011): Income polarization in Romania, *Romanian Journal of Economic Forecasting*, 14, 2, pp. 64-83.
11. Socol, C. - Marinaș, M. - Socol, G. (2010): *Sustenabilitate fiscală și coeziune socială. Comun și specific în submodelele Uniunii Europene* - Economie teoretică și aplicată, XVII, 3(544), pp. 25-44.
12. Voinea, L. - Mihaescu, F. (2009): The Impact of the Flat Tax Reform on Inequality - the case of Romania, *Romanian Journal of Economic Forecasting*, 12, 4, pp. 19-41.
13. \*\*\* European Commission (2009): Directorate-General for Taxation and Customs Union, Reckon report.
14. \*\*\* European Commission (2010): Taxation trends in the European Union, available on-line at: [http://ec.europa.eu/taxation\\_customs/taxation/gen\\_info/economic\\_analysis/tax\\_structures/index\\_en.htm](http://ec.europa.eu/taxation_customs/taxation/gen_info/economic_analysis/tax_structures/index_en.htm), accessed: 07 January 2012.
15. \*\*\* Eurostat: Sustainability report in 2009.

## Appendix

**Table A.1 Flat tax in EU-27**

Countries	Adoption year	Flat tax of personal income %		Flat tax of corporate income %	
		2009	Before the reform	2009	Before the reform
Estonia	1994	26	16-33	21	35
Lithuania	1994	24	18-33	15	29
Latvia	1997	25	25 and 10	15	25
Slovakia	2004	19	10-38	19	25
Romania	2005	16	18-40	16	25
Bulgaria	2008	10	20-24	10	10
Czech Republic	2008	15	12-32	21	24

Source: Eurostat

**Figure A.2 The evolution of income tax revenues vs. average gross wage evolution in 2000-2009**



Source: khris.ro